

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An apparatus for inspecting a specimen, comprising:
inspection means having a sensor to detect an image of a pattern formed on a specimen to be inspected and a processor to process the detected image to extract a defect candidate of the pattern with its location information;

output means for outputting an image of the ~~detected~~ extracted defect candidate and data including location information of the defect candidate;

information transfer means for transferring information outputted from the output means;

store means for storing information outputted from the output means and transferred by the information transfer means; and

processing means having a display screen ~~and the processing means processes~~ for processing the information stored in the store means and ~~displays for displaying~~ the processed information on the display screen;

wherein said processing means simultaneously displays defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate on the display screen.

2. (original) The apparatus according to claim 1, wherein the processing means displays defect candidate location data on the display screen.

Claim 3 (canceled)

4. (currently amended) The apparatus according to claim 1, wherein the processing means displays a defect candidate location data in the map format on the display screen.

5. (original) The apparatus according to claim 1, wherein the processing means classifies the defect candidates stored in the store means and displays the classified defect candidates on the display screen.

6. (original) The apparatus according to claim 5, wherein the processing means displays the classified defect candidate image on the display screen.

7. (currently amended) The apparatus according to claim 5, wherein the processing means displays the classified defect candidates in the map format on the display screen.

8. (currently amended) An apparatus for inspecting a specimen, comprising:

an image detecting unit which detects images of a pattern formed on a substrate;

a defect candidate extracting unit which extracts a defect candidate from the detected images;

an outputting unit which outputs data of the extracted defect candidate including images of the extracted defect candidate;

a data storing unit which stores the outputted data from the outputting unit including images of the extracted defect candidate;

a processing unit which processes the stored data; and

a display unit which simultaneously displays processed data processed by the processing unit including defect candidate distribution data in a wafer map formed and an enlarged image of a defect candidate side by side on a display screen.

9. (original) An apparatus according to the claim 8, wherein said image detecting unit detects optical image of the pattern.

10. (original) An apparatus according to the claim 8, wherein said image detecting unit detects secondary electron image of the pattern.

11. (original) An apparatus according to the claim 8, wherein said defect candidate extracting unit extracts a defect candidate image and its location information from the detected images.

12. (original) An apparatus according to the claim 8, wherein said defect candidate extracting unit extracts a defect candidate from the detected images by comparing the detected images with reference images.

13. (original) An apparatus according to the claim 8, wherein said outputting unit and the data storing unit are connected by a network.

14. (original) An apparatus according to the claim 8, wherein said processing unit detects defects among the stored defect candidates and the display unit displays an image of the extracted defect on the display screen.

15. (currently amended) An apparatus according to the claim 8, wherein said processing unit detects defects among the stored defect candidates and the display unit displays the ~~extracted defect in a map form~~ detected defects in the map format on the display screen.

16. (currently amended) An apparatus according to the claim 8, wherein said processing unit detects defects among the stored defect candidates by using a ~~valuable-variable~~ threshold value.

17. (currently amended) An apparatus according to the claim 15, wherein said ~~valuable-variable~~ threshold value is determined on the display screen.

18. (currently amended) An apparatus for inspecting a specimen, comprising:
 a defect candidate data processing unit for processing data of defect candidates including images of defect candidates which are detected by a detection machine and transferred through a communication line and stored in a memory; and
 a display unit which simultaneously displays a-processed data of-processed by the defect candidate data processing unit including defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate which is one of the defect candidates display on the wafer map format on a display screen,

wherein ~~said the~~ defect candidate data processing unit detect defects among the defect candidates by using a threshold value determined on the display screen of the display unit.

19. (currently amended) An apparatus according to the claim 18, wherein ~~said the~~ defect candidate data processing unit classifies the defect candidate data and the display unit displays the classified defect candidate data on the display screen.

Claim 20 (canceled)

21. (currently amended) An apparatus according to the claim ~~20~~ 18, wherein ~~said the~~ map indicates distribution of the defect classified in the ~~sama~~ same category with the displayed defect image by the defect candidate data processing unit.

22. (currently amended) An apparatus according to the claim 18, wherein the display unit displays an image of defect which is pointed out on the map displayed on the display screen.